

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Yasusumi TANAKA

Application No. 10/507,161

Confirmation No.: 4117

Filed: September 9, 2004

Art Unit: 1772

For: GAS HERMETIC BAG, PACKAGING
MATERIAL, AND ADVERTISEMENT
MEDIUM

Examiner: B. T. O'Hern

SUPPLEMENTAL APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is in response to the Notification of Non-Compliant Appeal Brief dated October 9, 2007.

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is appellant Yasusumi Tanaka.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 20 claims pending in this application.

B. Current Status of Claims

1. Claims canceled: 1-29, 48 and 49
2. Claims withdrawn from consideration but not canceled: none
3. Claims pending: 30-47, 50 and 51
4. Claims allowed: none
5. Claims rejected: 30-47, 50 and 51

C. Claims On Appeal

The claims on appeal are claims 30-47, 50 and 51.

IV. STATUS OF AMENDMENTS

Applicant did not amend any claims after the Final Rejection dated December 19, 2006.

V. SUMMARY OF CLAIMED SUBJECT MATTER

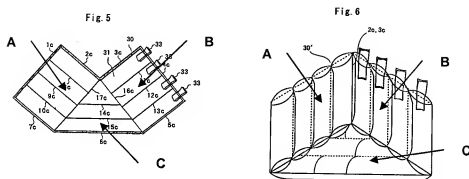
The appealed claims relate to a packing material, particularly to a packing material that is easy to ship and to produce on-site and that is suitable for protecting corners of articles of various sizes and shapes. Claims 30, 39, 50 and 51 are independent claims.

Each of the appealed claims recites at least three walls, two of which are side walls. For example, claim 30 recites “a packing material formed by holding a gas bag, comprising: a first inflatable triangular wall (see page 8, lines 15-20; P in Figs. 1 and 3); a second inflatable triangular wall (see page 8, lines 15-20; Q in Figs. 1 and 3); a first inflatable rectangular side wall (see page 8, lines 15-20; R in Figs. 1 and 3); a second inflatable rectangular side wall (see page 8, lines 15-20; S in Figs. 1 and 3); and a valve (see page 8, lines 22-25; x in Fig. 1) configured to inflate the first and second triangular walls (see page 8, lines 15-20; P, Q in Figs. 1 and 3) and the first and second rectangular side walls (see page 8, lines 15-20; R, S in Figs. 1 and 3), wherein the first rectangular side wall (see page 8, lines 15-20; R in Figs. 1 and 3) connects a first side of the first triangular wall (see page 8, lines 15-20; P in Figs. 1 and 3) and a first side of the second triangular side wall (see page 8, lines 15-20; Q in Figs. 1 and 3), the second rectangular side wall (see page 8, lines 15-20; S

triangular side wall (see page 8, lines 15-20; Q in Figs. 1 and 3), the second rectangular side wall (see page 8, lines 15-20; S in Figs. 1 and 3) connects a second side of the first triangular wall (see page 8, lines 15-20; P in Figs. 1 and 3) and a second side of the second triangular wall (see page 8, lines 15-20; Q in Figs. 1 and 3), a third side of the first triangular wall (see page 8, lines 15-20; P in Figs. 1 and 3) and a third side of the second triangular wall (see page 8, lines 15-20; Q in Figs. 1 and 3) are not connected to the first or second rectangular side walls (see page 8, lines 15-20; R, S in Figs. 1 and 3) so that an opening (see page 12, lines 3-7; arrow in Fig. 3) is created along the third sides of the first and second triangular walls (see page 8, lines 15-20; P, Q in Figs. 1 and 3), and the first triangular wall (see page 8, lines 15-20; P in Figs. 1 and 3) comprises a first sub bag, a second sub bag disposed on the first sub bag and a horizontal partition (see page 9, lines 8-11; 12a or 13a in Fig. 1) separating the first and second sub bags.” See Figs. 1 and 3 reproduced above.

Additionally, claim 39 recites “a packing material formed by holding a gas bag and adapted to cover a corner portion of an object, comprising: an inflatable bottom wall (see page 16, line 21-page 17, line 13; C in Figs. 5 and 6 as labeled by applicant for this brief) that is triangular or rectangular; a first inflatable side wall (see page 16, line 21-page 17, line 13; A in Figs. 5 and 6 as labeled by applicant for this brief) that stands on a first side of the bottom wall (see page 16, line 21-page 17, line 13; C in Figs. 5 and 6 as labeled by applicant for this brief); a second inflatable side wall (see page 16, line 21-page 17, line 13; B in Figs. 5 and 6 as labeled by applicant for this brief) that stands on a second side of the bottom wall (see page 16, line 21-page 17, line 13; C in Figs. 5 and 6 as labeled by applicant for this brief); and a valve (see page 17, lines 1-3; 33 in Fig. 5) configured to inflate the bottom wall (see page 16, line 21-page 17, line 13; C in Figs. 5 and 6 as labeled by applicant for this brief) and the first and second side walls (see page 16, line 21-page 17, line 13; A, B in Figs. 5 and 6 as labeled by applicant for this brief), wherein an apex formed by the bottom wall (see page 16, line 21-page 17, line 13; C in Figs. 5 and 6 as labeled by applicant for this brief) and the first and second side walls (see page 16, line 21-page 17, line 13; A, B in Figs. 5 and

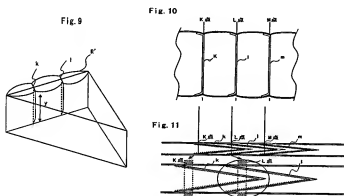
6 as labeled by applicant for this brief) is configured to cover the corner portion of an object.” Figs. 5 and 6 are reproduced below.



Similarly, claim 51 recites “a packing material formed by holding a gas bag and adapted to cover a corner portion of an object, comprising: a bottom wall (see page 16, line 21-page 17, line 13; C in Figs. 5 and 6 as labeled by applicant for this brief) that is triangular or rectangular; a first side wall (see page 16, line 21-page 17, line 13; A in Figs. 5 and 6 as labeled by applicant for this brief) that stands on a first side of the bottom wall (see page 16, line 21-page 17, line 13; C in Figs. 5 and 6 as labeled by applicant for this brief); and a second side wall (see page 16, line 21-page 17, line 13; B in Figs. 5 and 6 as labeled by applicant for this brief) that stands on a second side of the bottom wall (see page 16, line 21-page 17, line 13; C in Figs. 5 and 6 as labeled by applicant for this brief), wherein an apex formed by the bottom wall (see page 16, line 21-page 17, line 13; C in Figs. 5 and 6 as labeled by applicant for this brief) and the first and second side walls (see page 16, line 21-page 17, line 13; B in Figs. 5 and 6 as labeled by applicant for this brief) is configured to cover the corner portion of an object, and the bottom wall (see page 16, line 21-page 17, line 13; C in Figs. 5 and 6 as labeled by applicant for this brief) comprises a first sub bag, a second sub bag disposed on the first sub bag and a horizontal partition (see page 17, lines 3-5; 14c or 15c in Fig. 5) separating the first and second sub bags.” See Figs. 5 and 6 reproduced above.

Furthermore, dependent claims 33-38 and 42-45 recite a packing material having a set of vertical partitions (see page 18, line 24-page 20, line 14; k, l, m in Figs. 9-11), wherein each

partition comprises a film. The vertical partitions (see page 18, line 24–page 20, line 14; k, l, m in Figs. 9–11) divide the gas bag into a plurality of sub bags with respect to a plane parallel to the primary plane of the air bag. A packing material, wherein a set of vertical partitions (see page 18, line 24–page 20, line 14; k, l, m in Figs. 9–11) are arranged in folds prior to inflation, is illustrated in Figs. 9, 10 and 11 reproduced below.



VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 30–36, 39–45, 50 and 51 stand rejected under 35 USC 102(a) as anticipated by U.S. Patent No. 6,722,502 to Newman (hereinafter, “Newman”).

Claims 37, 38, 46 and 47 stand rejected under 35 USC 103(a) as obvious over Newman.

VII. ARGUMENT

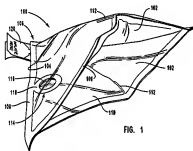
A. THE ANTICIPATION REJECTION SHOULD BE REVERSED BECAUSE NEWMAN DOES NOT TEACH THE TWO SIDE WALLS RECITED IN CLAIMS 30, 39, 50 AND 51.

As discussed above, claims 30 and 50 each recite a packing material comprising: (1) a first triangular wall, (2) a second triangular wall, (3) a first rectangular side wall and (4) a second rectangular side wall. For Newman to anticipate claims 30 and 50, Newman must disclose all of the features recited in these claims, including the first and second rectangular side walls (3, 4). Newman simply fails to disclose these features.

In the Action dated December 19, 2006, the Examiner stated:

Regarding claim 30, Newman ('502) teaches a packing material (*See col. 1, II. 5-7 and FIG-1, #100.*), comprising a first triangular wall (*FIG-1, top triangular wall #102.*); a second triangular wall (*FIG-1, bottom triangular wall #102.*); a first rectangular side wall (*FIG-4, left rectangular wall #104*); and a second rectangular side wall (*FIG-4, right rectangular wall #104*)...

Thus, the Examiner has asserted that the two adjacent edges (104) disclose the first and second rectangular side walls as recited in claims 30 and 50. As shown in Fig. 1 of Newman, attached below, the two adjacent edges (104) are not "walls," nor does Newman define the two adjacent edges to be anything but what they are—edges.



Newman provides further evidence that the edges are in fact edges, and not walls, by stating that the two adjacent edges (104) may be formed by joining the two triangular side walls (102) with a seal, e.g., a heat seal (Newman, col. 4, lines 7-20). These edges at most correspond to the peripheries (1a, 2a, 3a, 4a, 5a, 6a, 7a, 8a) disclosed in the first and second embodiments of packing materials in this application, which may also be formed by joining two sheets with a heat seal as described in paragraph [0030] of the specification. Consequently, Newman does not disclose the two side walls as recited in claims 30 and 50.

By the same token, independent claims 39 and 51 each recite a packing material comprising: (1) a bottom wall that is triangular or rectangular, (2) a first side wall and (3) a second side wall, wherein the first and second side walls each stand on different sides of the bottom wall. Again, Fig. 6 reproduced in Section V of this brief illustrates two side walls (A, B) that each stand on different sides of a bottom wall (C). Since Newman discloses only two walls, not three walls, Newman

cannot disclose two side walls (A, B) joined to a third bottom wall (C) as recited in claims 39 and 51. Thus, Newman fails to disclose or suggest all of the features recited in the pending independent claims, and this anticipation rejection should be reversed.

B. THE ANTICIPATION REJECTION FAILS AS TO CLAIMS 30-47 SINCE THE CLAIMED LIMITATION "INFLATABLE" SHOULD BE GIVEN PATENTABLE WEIGHT AS A STRUCTURAL LIMITATION.

In the Office Action dated December 19, 2007, the Examiner, referring to MPEP 2173.05(q), stated that the phrase "inflatable" in claims 30 and 39 would not be given any patentable weight since applicant was introducing use limitations into product claims. Again, in the Advisory Action dated June 2, 2007, the Examiner stated that "whether or not one inflates walls is a use limitation and said phrase is deemed to be a statement with regard to the intended use and is not further limiting in so far as the structure is concerned (see MPEP 2111.02)."

First, applicant notes that the Examiner has provided erroneous citations to the MPEP to support his assertion that the phrase "inflatable" should not be given any patentable weight. Second, the Examiner's assertion is unsupported by any section of the MPEP. MPEP 2173.05(q), referenced by the Examiner, relates to use claims, which are process claims that merely set forth uses without reciting any steps. Since claims 30 and 39 are product claims, not process claims, this section does not apply to the pending claims of this application. In addition, MPEP 2111.02, which was referenced by the Examiner, relates to whether the language of a preamble should be treated as a claim limitation. Since the limitations of inflatable walls are found in the bodies of claims 30 and 39, not in the preambles, this section of the MPEP is irrelevant to the present inquiry.

The Examiner may have been trying to refer to MPEP 2114, which relates to apparatus claims having functional languages. However, nothing in the MPEP supports the Examiner's assertion that the claimed limitation "inflatable" is a *functional* limitation. Rather, this limitation is a *structural* limitation, corresponding to a real structural and/or material difference between the claimed invention and Newman's invention.

For example, for a rectangular side wall to be inflatable as opposed to not inflatable, a definite difference in structure and/or material is required. A plastic block would not be inflatable because there is no inner cavity from which a pressure can be exerted outward. On the other hand, a stone with an inner cavity would not be inflatable since stone does not expand. Thus, the claim limitation "inflatable" recites a structural and/or material feature, which carries a patentable weight.

Since the adjacent edges (104) disclosed in Newman are sealed together (Newman, col. 4, lines 7-20), the edges are certainly not inflatable. Since Newman does not disclose inflatable side walls as recited in claims 30 and 39, this provides a second reason for reversing the anticipation rejection as to claims 30-47.

C. THE ANTICIPATION REJECTION SHOULD BE REVERSED AS TO CLAIMS 30-47 SINCE NEWMAN DOES NOT DISCLOSE OR SUGGEST A VALVE CONFIGURED TO INFLATE TWO SIDE WALLS AS RECITED IN CLAIMS 30 AND 39.

Claim 30 recites "a valve configured to inflate the first and second triangular walls and the first and second rectangular side walls." In the Action, the Examiner, referencing MPEP 2173(q), has stated that the claim limitation "configured to inflate" would not be given a patentable weight because it introduces a use limitation into a product claim. Again, the Examiner has referenced an incorrect section of the MPEP, and nothing in the MPEP supports the Examiner's assertion.

The claim limitation that "a valve [be] configured to inflate the first and second triangular walls and the first and second rectangular side walls" clearly sets out a structural limitation. For a valve to be configured to inflate the first and second rectangular side walls, the first and second rectangular side walls should be made out of a material and have a physical configuration that allow the side walls to be inflatable. In addition, the valve must somehow communicate with the first and second rectangular side walls.

As stated above, the two adjacent edges (104) of Newman are not configured to be inflatable. In addition, aside from the fact that Newman does not disclose the first and second

inflatable rectangular side walls, the valve (116) of Newman is not connected in any way to the two adjacent edges (104) and could not be used to inflate the edges even if they were inflatable.

By the same token, claim 39 recites a valve configured to inflate a bottom wall and a first and a second side walls. Since Newman fails to disclose at least three walls, two of which stand on different sides of a bottom wall, Newman does not disclose two side walls that are inflatable. In addition, the valve (116) of Newman does not communicate with three walls, and therefore is not configured to inflate two side walls and a bottom wall as recited in claim 39. Thus, claim 39 is not anticipated by Newman.

Accordingly, Newman does not disclose the claimed valves, and this provides a third reason for reversing the anticipation rejection as to claims 30-47.

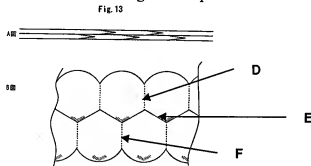
D. THE ANTICIPATION REJECTION SHOULD BE REVERSED AS TO CLAIMS 33-38 AND 42-47 SINCE NEWMAN DOES NOT DISCLOSE A SET OF VERTICAL PARTITIONS COMPRISING FILMS AS RECITED IN CLAIMS 33 AND 42.

Furthermore, claims 33 and 42 recite a set of vertical partitions (k, l, m) comprising films that divides the gas bag into a plurality of sub bags with respect to a plane parallel to a primary plane. See Fig. 9 reproduced in Section V of this brief. Newman simply fails to disclose a set of vertical partitions comprising films, not to mention a set of vertical partitions that divides the gas bag into a plurality of sub bags with respect to a plane parallel to a primary plane of the air bag as recited in claims 33 or 42.

The conjoined segment (112) of Newman pointed out by the Examiner is simply a union of the opposite sides of the chamber designed to "limit[s] the size of the inflatable chamber" (Newman, Fig. 1; col. 6, lines 5-8; and claim 6). The conjoined segment (112) is not made of a film as recited in claims 33 and 42, and does not divide the gas bag into a plurality of sub bags with respect to a plane parallel to a primary plane of the air bag. Accordingly, this provides a fourth reason to reverse this anticipation rejection as to claims 33-38 and 42-47.

- E. THE ANTICIPATION REJECTION SHOULD BE REVERSED AS TO CLAIMS 34-38 AND 43-47 SINCE NEWMAN DOES NOT DISCLOSE A SECOND SET OF VERTICAL PARTITIONS AND A HORIZONTAL PARTITION AS RECITED IN CLAIMS 34 AND 43.

Claims 34 and 43 recite two sets of vertical partitions (labeled by applicant as D, F for this brief), which are disposed on opposite sides of a horizontal partition (E). Thus, claims 34 and 43 recite at least one partition (E) and two sets of horizontal partitions (D, F). Fig. 13 reproduced below illustrates an example of two vertical partitions (D, F) disposed on opposite sides of a horizontal partition (E), wherein the centers of the two sets of vertical partitions (D, F) are offset halfway in between that of each other. Fig. 13 is reproduced below.



Since Newman does not even disclose a first set of vertical partitions (D) comprising films as recited in claims 33 and 42, Newman does not disclose a second set of vertical partitions (F) located on the opposite side of a horizontal partition (E) as recited in claims 34 and 43. Accordingly, Newman fails to disclose the packing materials recited in claims 34 and 43, and this provides a fifth reason to reverse this anticipation rejection as to claims 34-37 and 43-46.

- F. THE OBVIOUSNESS REJECTION SHOULD BE REVERSED SINCE NEWMAN FAILS TO DISCLOSE OR SUGGEST TWO INFLATABLE SIDE WALLS, A VALVE CONFIGURED TO INFLATE THE INFLATABLE SIDE WALLS, A SET OF VERTICAL PARTITIONS COMPRISING FILMS, AND OTHER LIMITATIONS RECITED IN CLAIMS 37, 38, 46 AND 47.

Claims 37, 38, 46 and 47 stand rejected as obvious over Newman. Claim 38 recites a packing material formed by holding a gas bag, comprising two inflatable triangular walls, two inflatable rectangular side walls, a valve configured to inflate the two triangular walls and the two rectangular side walls and a set of vertical partitions that divides the gas bag into a plurality of sub

bags with respect to a plane parallel to a primary plane of the gas bag, wherein each vertical partition comprises a film, and wherein a sub bag in the first triangular wall adjacent to the third side of the first triangular wall is shorter than a sub bag in the first triangular wall located away from the third side of the first triangular wall.

Again, Newman, as stated above, does not disclose or suggest two inflatable rectangular side walls, a valve configured to inflate the two inflatable triangular walls and the two inflatable rectangular side walls, or a set of vertical partitions. Thus, Newman cannot possibly disclose or suggest a set of vertical partitions that divide the gas bag into a plurality of sub bags with respect to a plane parallel to a primary plane of the gas bag, wherein each of the partitions comprises a film as claimed.

In addition, since Newman fails to disclose a set of vertical partitions that divides the gas bag into a plurality of sub bags, Newman fails to disclose a sub bag located adjacent to the third side of the first triangular wall that is shorter than a sub bag in the first triangular wall located away from the third side of the first triangular wall as claimed.

Similarly, claim 47 recites a packing material, comprising: an inflatable bottom wall, two inflatable side walls that each stand on different sides of the bottom wall, a valve configured to inflate the bottom wall and the two side walls, a set of vertical partitions that divide a gas bag into a plurality of sub bags with respect to a plane parallel to a primary plane of the air bag, wherein each of the vertical partitions comprises a film and wherein a sub bag in the triangular bottom wall located adjacent a side of the triangular bottom wall opposite from the apex is shorter than a sub bag in the triangular bottom wall located away from the side of the triangular bottom wall.

As stated above, Newman fails to disclose or suggest two side walls each standing on different sides of a bottom wall, a valve configured to inflate a bottom wall and two side walls, and a set of vertical partitions that divides a gas bag into a plurality of sub bags. Since Newman does not disclose a set of vertical partitions that divides a gas bag into a plurality of sub bags, Newman

cannot possibly disclose or suggest a sub bag in the triangular bottom wall located adjacent a side of the triangular bottom wall opposite from the apex that is shorter than a sub bag in the triangular bottom wall located away from the side of the triangular bottom wall as recited in 47.

Accordingly, the features recited in claims 38 and 47 are not disclosed or even suggested by Newman. The only disclosure related to these features is found in applicant's specification, the use of which would involve impermissible hindsight.

In addition, claims 37 and 46 recite a packing material formed by holding a gas bag, comprising two inflatable side walls, a valve configured to inflate the two side walls, a set of vertical partitions, each partitions comprising a film, that divides the gas bag into a plurality of sub bags with respect to a plane parallel to a primary plane of the gas bag, a horizontal partition that divides the gas bag into a plurality of sub bags with respect to a plane normal to the primary plane, and a second set of vertical partitions, wherein the two sets of vertical partitions are disposed on opposite sides of the horizontal partition, and wherein a sub bag above the horizontal partition is narrower than a sub bag below the horizontal partition so that a step structure is formed on a surface of the air bag.

As stated above, Newman fails to disclose or suggest two inflatable side walls, a valve configured to inflate the side walls, a set of vertical partitions that divides the gas bag into a plurality of sub bags with respect to a plane parallel to a primary plane of the gas bag. In addition, Newman fails to disclose a second set of vertical partitions, and a horizontal partition that divides the gas bag into a plurality of sub bags with respect to a plane normal to the primary plane, wherein the two sets of vertical partitions are disposed on opposite sides of the horizontal partition as stated above.

Since Newman fails to disclose or suggest two sets of vertical partitions that are disposed on opposite sides of a horizontal partition, Newman cannot possibly disclose or suggest a sub bag

above the horizontal partition that is narrower than a sub bag below the horizontal partition so that a step structure is formed on a surface of the air bag as recited in claims 37 and 46.

Accordingly, for the reasons provided above, claims 37, 38, 46 and 47 could not have been obvious in view of Newman, and this rejection should be reversed.

F. CONCLUSION

For the forgoing reasons, appellant respectfully request that the rejections of claims 30-47, 50 and 51 be reversed.

VIII. CLAIMS

A copy of the claims involved in the present appeal is attached hereto as Appendix A.

IX. EVIDENCE

No evidence pursuant to 37 CFR 1.130, 1.131, or 1.132, or entered by, or relied upon by the examiner is being submitted.

X. RELATED PROCEEDINGS

No related proceedings are referenced in Section II above. Hence no Appendix is included.

Dated: October 24, 2007

Respectfully submitted,

By *S. Laura Chung*
S. Laura Chung
Registration No. 59,875
MORRISON & FOERSTER LLP
1650 Tysons Blvd, Suite 400
McLean, Virginia 22102
Telephone: (703) 760-7312
Facsimile: (703) 760-7777

CLAIMS APPENDIX

Claims Involved in the Appeal of Application Serial No. 10/507,161

30. A packing material formed by holding a gas bag, comprising:

a first inflatable triangular wall;

a second inflatable triangular wall;

a first inflatable rectangular side wall;

a second inflatable rectangular side wall; and

a valve configured to inflate the first and second triangular walls and the first and second rectangular side walls,

wherein the first rectangular side wall connects a first side of the first triangular wall and a first side of the second triangular side wall,

the second rectangular side wall connects a second side of the first triangular wall and a second side of the second triangular wall,

a third side of the first triangular wall and a third side of the second triangular wall are not connected to the first or second rectangular side wall so that an opening is created along the third sides of the first and second triangular walls,

and the first side of the first triangular wall has the same length as the second side of the first triangular wall, and the first side of the second triangular wall has the same length as the second side of the second triangular wall.

31. The packing material of claim 30, further comprising a partition separating a portion of the gas bag from another portion of the gas bag.

32. The packing material of claim 31, wherein the partition comprises a film adhered to an inside wall of the gas bag.

33. The packing material of claim 30, further comprising a set of vertical partitions so that

the gas bag is divided into a plurality of sub bags with respect to a plane parallel to a primary plane of the air bag, wherein each of the vertical partitions comprises a film.

34. The packing material of claim 33, further comprising a horizontal partition so that the gas bag is divided into a plurality of sub bags with respect to a plane normal to the primary plane, and another set of the vertical partitions, wherein the set of vertical partitions and the another set of the vertical partitions are disposed on opposite sides of the horizontal partition.

35. The packing material of claim 34, wherein each of the vertical partitions in the set is placed on a corresponding one of the vertical partitions in the another set.

36. The packing material of claim 34, wherein an interval each of the vertical partitions in the set is not placed on any of the vertical partitions in the another set.

37. The packing material of claim 34, wherein a sub bag above the horizontal partition is narrower than a sub bag below the horizontal partition so that a step structure is formed on a surface of the air bag.

38. The packing material of claim of claim 33, wherein a sub bag in the first triangular wall located adjacent the third side of the first triangular wall is shorter than a sub bag in the first triangular wall located away from the third side of the first triangular wall.

39. A packing material formed by holding a gas bag and adapted to cover a corner portion of an object, comprising:

- an inflatable bottom wall that is triangular or rectangular;
- a first inflatable side wall that stands on a first side of the bottom wall;
- a second inflatable side wall that stands on a second side of the bottom wall;
- a valve configured to inflate the bottom wall and the first and second side wall,

wherein an apex formed by the bottom wall and the first and second side walls is configured to cover the corner portion of an object.

40. The packing material of claim 39, further comprising a partition separating a portion of

the gas bag from another portion of the gas bag.

41. The packing material of claim 40, wherein the partition comprises a film adhered to an inside wall of the gas bag.

42. The packing material of claim 39, further comprising a set of vertical partitions so that the gas bag is divided into a plurality of sub bags with respect to a plane parallel to a primary plane of the air bag, wherein each of the vertical partitions comprises a film.

43. The packing material of claim 42, further comprising a horizontal partition so that the gas bag is divided into a plurality of sub bags with respect to a plane normal to the primary plane, and another set of the vertical partitions, wherein the set of vertical partitions and the another set of the vertical partitions are disposed on opposite sides of the horizontal partition.

44. The packing material of claim 43, wherein each of the vertical partitions in the set is placed on a corresponding one of the vertical partitions in the another set.

45. The packing material of claim 43, wherein each of the vertical partitions in the set is not placed on any of the vertical partitions in the another set.

46. The packing material of claim 43, wherein a sub bag above the horizontal partition is narrower than a sub bag below the horizontal partition so that a step structure is formed on a surface of the air bag.

47. The packing material of claim of claim 42, wherein a sub bag in the triangular bottom wall located adjacent a side of the triangular bottom wall opposite from the apex is shorter than a sub bag in the triangular bottom wall located away from the side of the triangular bottom wall.

50. A packing material formed by holding a gas bag, comprising:

a first triangular wall;

a second triangular wall;

a first rectangular side wall; and

a second rectangular side wall,

wherein the first rectangular side wall connects a first side of the first triangular wall and a first side of the second triangular side wall,

the second rectangular side wall connects a second side of the first triangular wall and a second side of the second triangular wall,

a third side of the first triangular wall and a third side of the second triangular wall are not connected to the first or second rectangular side wall so that an opening is created along the third sides of the first and second triangular walls, and

the first triangular wall comprises a first sub bag, a second sub bag disposed on the first sub bag and a horizontal partition separating the first and second sub bags.

51. A packing material formed by holding a gas bag and adapted to cover a corner portion of an object, comprising:

a bottom wall that is triangular or rectangular;

a first side wall that stands on a first side of the bottom wall; and

a second side wall that stands on a second side of the bottom wall,

wherein an apex formed by the bottom wall and the first and second side walls is configured to cover the corner portion of an object, and

the bottom wall comprises a first sub bag, a second sub bag disposed on the first sub bag and a horizontal partition separating the first and second sub bags.

EVIDENCE APPENDIX

[NONE.]

RELATED PROCEEDINGS APPENDIX

[NONE.]